Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An illumination system configured to illuminate a field in a field plane, the illumination system comprising:

at least one optical integrator which splits a light bundle emitted by a light source into a plurality of light channels each having a light intensity; and

a filter in the light path from the light source to the field plane, with the filter ~~having~~ comprising filter elements which are configured in such a way that the light intensity of at least one light channel is reduced in the light path after the filter elements,

wherein:

the optical integrator comprises a first optical element with a plurality of first raster elements;

the optical integrator comprises a second optical element with a plurality of second raster elements;

the plurality of first raster elements is configured to be projected directly into the field plane, or to be projected via an intermediate image into the field plane;

the filter elements comprise diaphragms located in front of the plurality of first elements along the light path;

the filter elements are configured to vary an expansion of the light channels in a scanning direction; and

the illumination system is [[a]] configured to be used in EUV microlithography with light of a wavelength in the region between about 11 nm and about 14 nm.

2. (Currently Amended) The illumination system as claimed in claim 1, wherein a reduction of the light intensity of the at least one light channel after the filter elements is within > 0 and < 100% of the light intensity of the respective light channel before the filter elements.

3. (Currently Amended) The illumination system as claimed in claim 2,wherein a reduction of the light intensity of the at least one light channel after the filter elements is within > 25% and < 80% of the light intensity of the respective light channel before the filter elements.

4. (Currently Amended) The illumination system as claimed in claim 2, wherein the at least one light channel illuminates a surface of the filter elements and that the filter elements are [[is]] arranged such that the reduction of the light intensity is different at different places of the illuminated surface.

5. (Currently Amended) The illumination system as claimed in claim 2, wherein the at least one light channel illuminates a surface of the filter elements and the filter elements are [[is]] arranged such that the reduction of the light intensity is the same at different places of the illuminated surface.

6 - 12. (Cancelled).

13. (Previously Presented) The illumination system as claimed in claim 1, wherein the field is a ring field with a radial and azimuthal extension.

14. (Previously Presented) The illumination system as claimed in claim 13, wherein the optical element comprises at least a field forming optical component and the optical component is sufficiently corrected in an aplanatic way at least in the radial alignment of the pupil image.

15. (Previously Presented) The illumination system as claimed in claim 1, wherein the filter element is arranged in the light path from the light source to the field plane close to the optical integrator as a separate component, or is integrated in the optical integrator.

16. (Currently Amended) The illumination system as claimed in claim 1, wherein the filter element is arranged in the light path from the light source to the field plane ~~in front of and~~ close to the optical integrator.

17- 24. (Cancelled)

25. (Previously Presented) The illumination system as claimed in claim 1, wherein the filter element is changeable.

26. (Previously Presented) A projection exposure system comprising:

a light source,

an illumination system as claimed in claim 1 configured to illuminate a field in a field plane, and

a projective objective configured to project an object arranged in the field plane into an image in an image plane,

wherein the projection exposure system is a scanner type projection exposure apparatus configured to be used in EUV microlithography.

27. (Cancelled).

28. (Currently Amended) A method, comprising:

~~for producing micro-structured components by~~ using a projection exposure system to produce micro-structured components, the projection exposure system comprising:

~~as claimed in claim 26~~ a light source,

an illumination system as claimed in claim 1 configured to illuminate a field in a field plane, and

a projective objective configured to project an object arranged in the field plane into an image in an image plane,

wherein the projection exposure system is a scanner type projection exposure apparatus configured to be used in EUV microlithography.

29. (Currently Amended) An illumination system configured to illuminate a field in a field plane, the illumination system comprising:

at least one optical integrator which splits a light bundle emitted by a light source into a plurality of light channels each having a light intensity, and

a filter ~~situated~~ in the light path from the light source to the field plane, with the filter ~~having~~ comprising filter elements which are configured in such a way that the light intensity of at least one light channel is reduced in the light path after the filter elements,

wherein:

the optical integrator comprises a first optical element with a plurality of first raster elements;

the optical integrator comprises a second optical element with a plurality of second raster elements;

the plurality of first raster elements is configured to be projected directly into the field plane, or to be projected via an intermediate image into the field plane;

at least one of the filter elements is configured to reduce the light intensity of at least one light channel;

the at least one filter element comprises a reflective optical component associated with the light channel;

the reflective optical component has a reflectivity adjusted to the reduction; and

the illumination system is configured to be used in EUV microlithography with light of a wavelength in the region between about 11 nm and about 14 nm.

30-42. (Cancelled).

43. (New) The illumination system of claim 1, wherein the illumination system is configured so that a reduction of light intensity occurs in a location-dependent manner.

44. (New) The illumination system of claim 1, wherein the filter elements comprise active filter elements so that the light intensity is reduced in a variable manner.

45. (New) The illumination system of claim 44, wherein the active filter elements comprise comb diaphragms that are rotatable into the light path.

46. (New) The illumination system of claim 1, wherein the filter elements are configured and arranged so that a substantially homogeneous illumination of the field in the field plane perpendicular to the scanning direction is achieved, so that uniformity errors of a scanning energy in the field plane are less than ± 3%, with the scanning energy being the illumination intensity of a field integrated in a scanning direction.

47. (New) The illumination system of claim 46, wherein uniformity errors are less than ± 1%.

48. (New) The illumination system of claim 29, wherein the filter is exchangeable.

49. (New) The illumination system of claim 29, wherein the filter elements comprise active filter elements so that the light intensity is reduced in a variable manner.

50. (New) The illumination system of claim 49, wherein the active filter elements comprise comb diaphragms that are rotatable into the light path.

51. (New) The illumination system of claim 29, wherein the field is a ring field with a radial and azimuthal extension.

52. (New) The illumination system of claim 29, wherein the filter elements are configured and arranged so that a substantially homogeneous illumination of the field in the field plane perpendicular to the scanning direction is achieved, so that uniformity errors of a scanning energy in the field plane are less than ± 3%, with the scanning energy being the illumination intensity of a field integrated in a scanning direction.

53. (New) The illumination system of claim 52, wherein uniformity errors are less than ± 1%.

54. (New) A projection exposure system comprising:

a light source,

an illumination system as claimed in claim 29 configured to illuminate a field in a field plane, and

a projective objective configured to project an object arranged in the field plane into an image in an image plane,

wherein the projection exposure system is a scanner type projection exposure apparatus configured to be used in EUV microlithography.

55. (New) A method, comprising:

using a projection exposure system to produce micro-structured components, the projection exposure system comprising:

a light source,

an illumination system as claimed in claim 29 configured to illuminate a field in a field plane, and

a projective objective configured to project an object arranged in the field plane into an image in an image plane,

wherein the projection exposure system is a scanner type projection exposure apparatus configured to be used in EUV microlithography.